

HAMBURG.

(M. Rumker.)

|              | Hamburg M.T.                           | R.A.                                    | Dec.                                    |             |
|--------------|--|---|---|-------------|
|              | <sup>h</sup> <sup>m</sup> <sup>s</sup> | <sup>°</sup> <sup>'</sup> <sup>''</sup> | <sup>°</sup> <sup>'</sup> <sup>''</sup> |             |
| 1846 Jan. 27 | 6 8 55.3                               | 9 54 15.7                               | — 1 33 33.9                             |             |
|              | 10 25.7                                | .....                                   | 2 15 41.2                               |             |
| Feb. 2       | 6 28 53.2                              | 15 29 13.0                              | 3 22 40.8                               |             |
| 9            | 7 28 48.3                              | 22 41 45.7                              | 4 17 52.5                               | Bright Head |
| 14           | 6 39 37.5                              | 28 15 43.0                              | 4 22 55.3                               | Faint       |
|              | 46 36                                  | 28 18 32.3                              | 4 31 50.1                               | Bright Head |
| 15           | 6 44 17.0                              | 29 27 34.5                              | 7 28 49.4                               | Faint Head  |
| 26           | 7 16 33.4                              | 44 11 19.2                              | — 7 35 10.0                             | Bright      |
|              | 16 50.4                                | 15 34.9                                 |   |             |

BERLIN.

(M. Encke.)

|              | Berlin M.T.                            | R.A.                                    | Dec.                                    |                    |
|--------------|--|---|---|--------------------|
|              | <sup>h</sup> <sup>m</sup> <sup>s</sup> | <sup>°</sup> <sup>'</sup> <sup>''</sup> | <sup>°</sup> <sup>'</sup> <sup>''</sup> |                    |
| 1846 Jan. 27 | 8 8 14.5                               | 9 56 34.8                               | — 1 31 32.8                             | Faint preced. Head |
|              | 8 8 20.0                               | 58 0.9                                  | .....                                   | Bright following   |
|              | 8 24 24.4                              | 57 13.5                                 | .....                                   | Faint preceding    |
|              | 8 24 30.0                              | 58 37.5                                 | 1 34 2.8                                | Bright following   |
| 28           | 7 53 21.5                              | 10 50 53.5                              | — 1 40 10.2                             | Bright following   |

STARFIELD.

(Mr. Lassell.)

Starfield Sid. T.  
1846 Mar. 2. At 6<sup>h</sup> 48<sup>m</sup> 5<sup>s</sup> second and bright head follows star in 4<sup>m</sup> 24<sup>s</sup>.1  
is south of star 6' 19".5  
Approximate place of star R.A. 3 18 19 N.P.D. 98° 48' 15" (9.10) mag.  
[Perhaps star Bessel's Zone 246 R.A. 3 18 15.3 Decl. —8° 45' 25" (8).]

*Relative Positions of the two heads of BIELA's Comet.*

CAMBRIDGE.

|              | Position. | Distance. |
|--------------|-----------|-----------|
| 1846 Jan. 23 | 327° 43'  | 145".4    |
| 24           | 328 48    | 148.0     |

KÖNIGSBERG.

With the Heliometer.

|              | Position. | Distance. |
|--------------|-----------|-----------|
| 1846 Jan. 26 | 328° 36'  | 165".1    |
| 27           | 330 38    | 169.3     |

BERLIN.

|              | Berlin M.T.               | R.A.                                    | Dec.                                    |
|--------------|---------------------------|---|---|
|              | <sup>h</sup> <sup>m</sup> | <sup>°</sup> <sup>'</sup> <sup>''</sup> | <sup>°</sup> <sup>'</sup> <sup>''</sup> |
| 1846 Jan. 27 | 8 16                      | 1 25.0                                  | 2 26.1                                  |
| 28           | 7 8                       | 1 24.0                                  | 2 26.5                                  |
| 30           | 6 37                      | 1 26.9                                  | 2 40.8                                  |
| Feb. 2       | 7 32                      | 1 30.0                                  | 2 58.7                                  |
| 4            | 6 48                      | 1 38.1                                  | 3 15.4                                  |

HAMBURG.

|              | Position. | Distance. |
|--------------|-----------|-----------|
| 1846 Feb. 14 | 25° 7'    | 331".0    |
| 26           | 33 4      | 457.3     |

## STARFIELD.

|              | Position.        | Distance. |
|--------------|------------------|-----------|
| 1846 March 2 | $328^{\circ}78'$ | $8'44''$  |

*ELEMENTS of BIELA's Comet.*

The following elements are computed by Dr. Brunnnow and M. d'Arrest from the observations of November 29, December 26, and January 27.

| Epoch January 0, 1846. | Berlin M. T.            | Differences from Santini. |
|------------------------|-------------------------|---------------------------|
| L .....                | $102^{\circ}46'27''.48$ | $+2'3''.52$               |
| $\pi$ .....            | $109'546''.56$          | $+1'23''.23$              |
| $\delta$ .....         | $245'56'57''.82$        | $-20''.86$                |
| $i$ .....              | $12'34'14''.49$         | $1'11''.36$               |
| $\phi$ .....           | $49'3'59''.42$          | $6'40''.56$               |
| Log. $a$ .....         | $0.5442926$             | $-0.0020434$              |
| Mean Motion            | $541''.46161$           | $+3''.80798$              |
| Time .....             | Feb. 11.03268           | $-0.37282$                |

If these differences be *subtracted* from the elements here given, the result will be Santini's elements.

*DE VICO's Third Comet.*

Father De Vico communicated the discovery of his third comet to the Astronomer Royal, in a letter dated January 27, 1845. "I have the pleasure to announce to you the discovery of another comet in *Eridanus*, made on the evening of the 24th instant. The first apparent observed position, which I believe to be tolerably accurate, is as follows:—

|              | Rome M.T.           | R.A.                | Dec.                  |
|--------------|---------------------|---------------------|-----------------------|
|              | $^{\circ}$ $'$ $''$ | $^{\circ}$ $'$ $''$ | $^{\circ}$ $'$ $''$   |
| 1846 Jan. 24 | $10'38'17''.8$      | $4'6'59''.2$        | $-7^{\circ}11'30''.6$ |

"The hourly motion is about  $1^{\circ}.434$  to the east, and  $2'46''$  to the north."

*OBSERVATIONS.*

## BERLIN.

|              | Berlin M.T.         | R.A.                  | Dec.                   |
|--------------|---------------------|-----------------------|------------------------|
|              | $^{\circ}$ $'$ $''$ | $^{\circ}$ $'$ $''$   | $^{\circ}$ $'$ $''$    |
| 1846 Feb. 14 | $7'22'56''.2$       | $67^{\circ}44'38''.9$ | $+16^{\circ}37'42''.0$ |
| 18           | $9'13'45''.9$       | $69'23'30''.6$        | $20'26'58''.7$         |
| 22           | $7'24'50''.4$       | $71'6'41''.7$         | $23'49'34''.2$         |
|              | $7'44'40''.4$       | $71'7'6''.1$          | $+23'50'19''.0$        |

## ALTONA.

In the Meridian.

(M. Petersen.)

|              | Altona M.T.         | R.A.                 | Dec.                   |
|--------------|---------------------|----------------------|------------------------|
|              | $^{\circ}$ $'$ $''$ | $^{\circ}$ $'$ $''$  | $^{\circ}$ $'$ $''$    |
| 1846 Feb. 15 | $6'51'46''.0$       | $68^{\circ}7'47''.9$ | $+17^{\circ}34'40''.2$ |

The comet has an evident nucleus.